

DEPARTMENT of ENVIRONMENTAL SERVICES
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: GOOSE POND	Lake Area (ha): 4.82
Town: ALEXANDRIA	Maximum depth (m): 7.1
County: Grafton	Mean depth (m): 3.3
River Basin: Merrimack	Volume (m ³): 161000
Latitude: 43°38'27" N	Relative depth: 2.9
Longitude: 71°47'31" W	Shore configuration: 1.67
Elevation (ft): 701	Areal water load (m/yr): 4.00
Shore length (m): 1300	Flushing rate (yr ⁻¹): 1.20
Watershed area (ha): 36.2	P retention coeff.: 0.70
% watershed ponded: 0.0	Lake type: natural

BIOLOGICAL:

25 January 1995

25 August 1994

DOM. PHYTOPLANKTON (% TOTAL)	#1	RHIZOLENIA 45%	CHRYSOSSPHAERELLA 55%
	#2	DINOBYRON 40%	ASTERIONELLA 20%
	#3	ASTERIONELLA 10%	
PHYTOPLANKTON ABUNDANCE (units/mL)			
CHLOROPHYLL-A (µg/L)			6.00
DOM. ZOOPLANKTON (% TOTAL)	#1	LRG GRN RND CILIATE 31%	NAUPLIUS LARVA 36%
	#2	TINTINNIDAE CILIATE 26%	CYCLOPOID COPEPOD 16%
	#3	KERATELLA 26%	GASTROPUS 14%
ROTIFERS/LITER		79	158
MICROCRUSTACEA/LITER		2	207
ZOOPLANKTON ABUNDANCE (#/L)		205	371
VASCULAR PLANT ABUNDANCE			Abundant
SECCHI DISK TRANSPARENCY (m)			4.1
BOTTOM DISSOLVED OXYGEN (mg/L)		9.7	0.4
BACTERIA (E. coli, #/100 ml)	#1		< 1
	#2		< 1
	#3		

SUMMER THERMAL STRATIFICATION:

stratified

Depth of thermocline (m): 5.4
Hypolimnion volume (m³): None
Anoxic volume (m³): 250

CHEMICAL:

Lake: GOOSE POND

Town: ALEXANDRIA

	25 January 1995		25 August 1994		
DEPTH (m)	2.5	4.5	2.0		6.0
pH (units)	6.0	5.9	6.3		5.8
A.N.C. (Alkalinity)	4.1	3.4	1.8		3.0
NITRATE NITROGEN	0.05	< 0.10	< 0.05		< 0.05
TOTAL KJELDAHL NITROGEN	0.37	0.30	0.31		0.14
TOTAL PHOSPHORUS	0.015	0.009	0.013		0.020
CONDUCTIVITY (μ mhos/cm)	19.0	19.4	19.1		21.9
APPARENT COLOR (cpu)	12	12	20		30
MAGNESIUM			0.34		
CALCIUM			1.4		
SODIUM			0.8		
POTASSIUM			0.36		
CHLORIDE	< 2	< 2	< 2		< 2
SULFATE	5	4	4		4
TN : TP	28	33	24		7
CALCITE SATURATION INDEX			4.6		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1994

D.O. S.D. PLANT CHL TOTAL CLASS

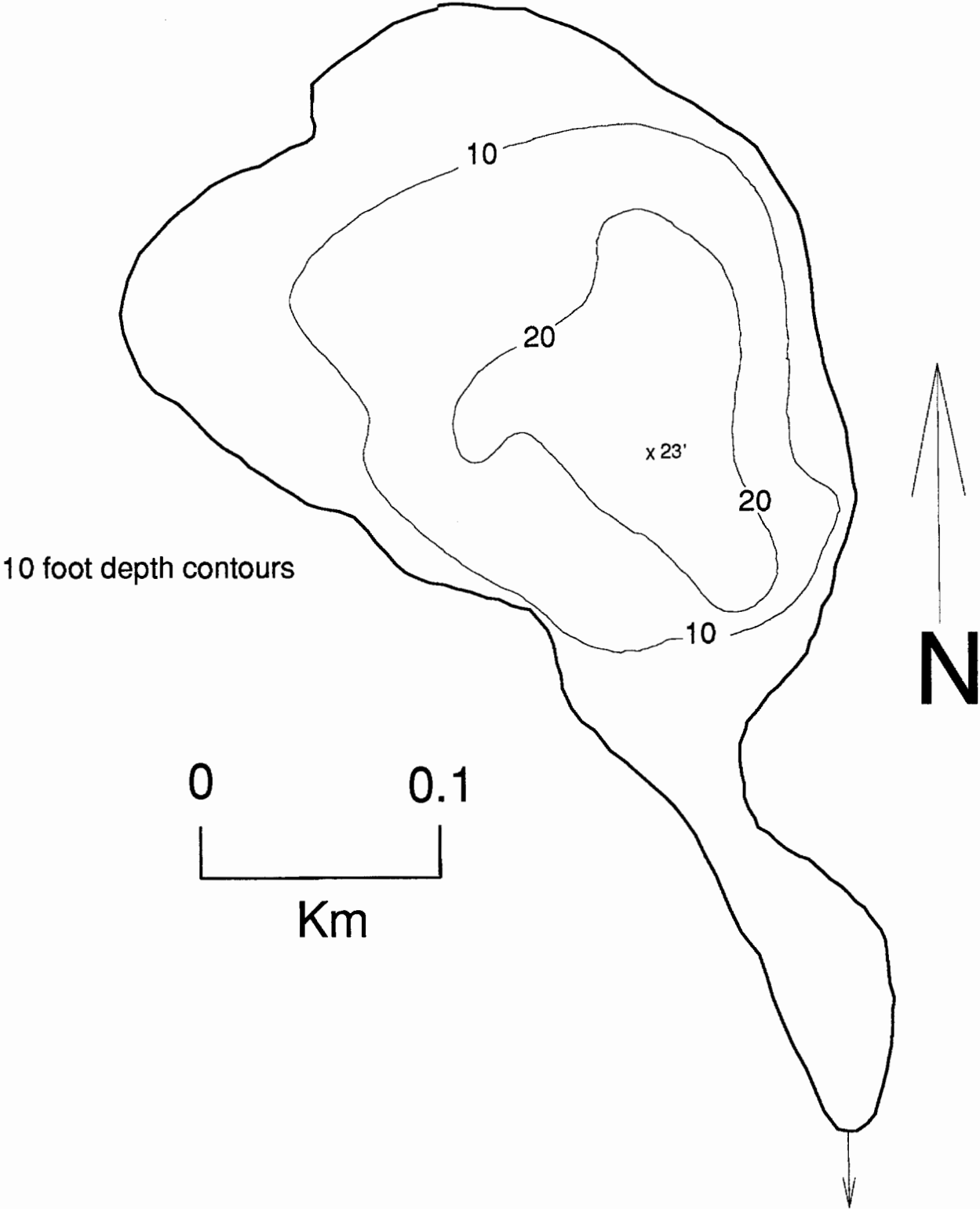
**	2	5	1	8	Meso.
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COMMENTS:

1. This is a small, undeveloped pond located adjacent to Newfound Lake and accessible by a 4-wheel drive road only. No launch site was present; the boat was carried about 100 yards to the pond.
2. It is a slightly acid, clear-water pond with abundant vascular plant growth.

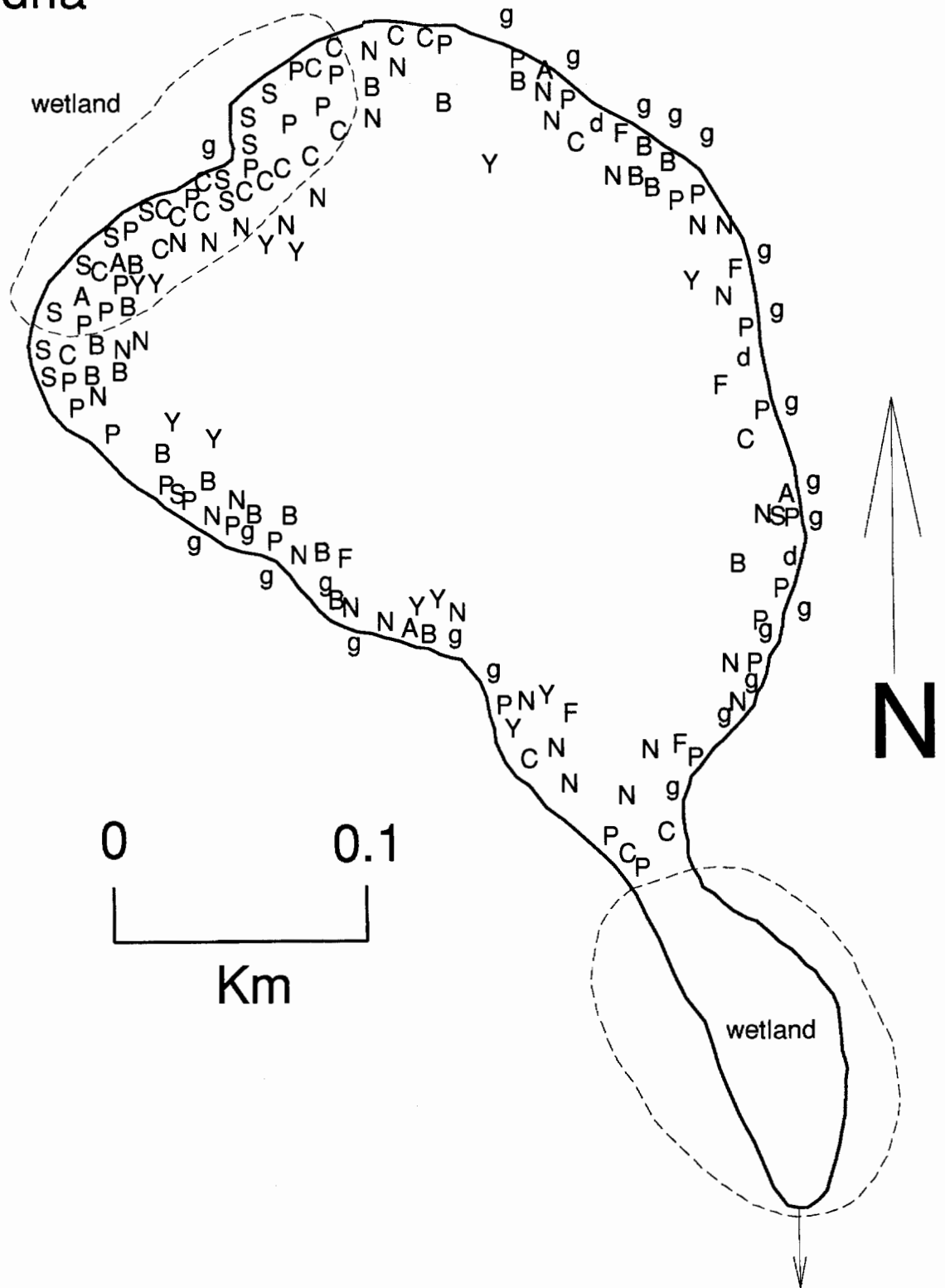
Goose Pond

Alexandria



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Alexandria



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